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09/932,381 08/17/2001		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
		Serge Lasserre	TI-31354	
23494	7590 10/07/2004		EXAMINER	
	TRUMENTS INCOR	BRAGDON, REGINALD GLENWOOD		
DALLAS, T	474, M/S 3999 C 75265		ART UNIT	PAPER NUMBER
		•	2188	

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applic	ation No.	<u> </u>	Applicant(s)			
Office Action Summary		09/932		,	LASSERRE, SERGE			
		Exami		·	Art Unit			
	-	Ì	ild G. Bragdon		2188			
	The MAILING DATE of this communi			with the c	orrespondence address			
Period fo	- <del>-</del>				0) 5D014			
THE I - Externanter - If the - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOMALLING DATE OF THIS COMMUNION is ions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this common period for reply specified above is less than thirty (30 period for reply is specified above, the maximum state to reply within the set or extended period for reply eply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no unication. )) days, a reply within the tutory period will apply ar will, by statute, cause the	statutory minimum of the dwill expire SIX (6) MC application to become	a reply be tim hirty (30) days ONTHS from ABANDONEI	ely filed will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).			
Status					<u>\</u>			
1)[🛛	Responsive to communication(s) file	d on <u>20 <i>July</i> 2004</u>	and 15 Septem	<u>ber 2004</u>				
2a)⊠	☐ This action is <b>FINAL</b> . 2b)☐ This action is non-final.							
3)[	ince this application is in condition for allowance except for formal matters, prosecution as to the merits is osed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠ 5)⊠ 6)⊠ 7)⊠ 8)□	Claim(s) 3-12 and 14-22 is/are pend 4a) Of the above claim(s) is/are Claim(s) 1-6,11 and 14-20 is/are allocal Claim(s) 12,21 and 22 is/are rejected Claim(s) 7-10 is/are objected to. Claim(s) are subject to restriction Papers  The specification is objected to by the	re withdrawn from wed. d. tion and/or electio	consideration.					
9)☐ The specification is objected to by the Examiner.  10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
/	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	ınder 35 U.S.C. § 119	٠						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (P nation Disclosure Statement(s) (PTO-1449 or r No(s)/Mail Date			o(s)/Mail Da of Informal P	(PTO-413) ste atent Application (PTO-152)			

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#### **DETAILED ACTION**

## Information Disclosure Statement

1. The Information Disclosure Statement(s) received 16 July 2004 has been considered. Please see the attached PTO-1449(s).

## **Specification**

2. Applicant is requested to update any data (continuation serial number, patent number, etc...) concerning co-pending or related applications listed in the specification.

The status of the applications on pages 1 and 11 should be updated as appropriate.

## Claim Objections

3. Claims 7-10 are objected to because of the following informalities:

As per claim 7, line 11, "valid" should be --dirty--.

All dependent claims are objected to as having the same deficiencies as the claims they depend from.

Appropriate correction is required.

# Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 21-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claim 21, Applicant indicates that the specification teaches the limitations of this claim at paragraph 67 (see page 11 of the response filed 20 July 2004). However, it is not clear how the specification as filed (in paragraph 67 on page 25), or the pre-grant publication 2002/0078268 (in paragraph 67, page 5) support the limitations as set forth in the claim.

With respect to claim 22, Applicant indicates that the specification teaches the limitations of this claim at paragraph 66 (see page 11 of the response-filed 20 July 2004). However, it is not clear how the specification as filed (in paragraph 66 on page 25), or the pre-grant publication 2002/0078268 (in paragraph 66, page 5) support the limitations as set forth in the claim.

#### Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by John M. Goodman ("Memory Management for All of Us").

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As per claim 12, Goodman teaches the use of present bits ("indicator bits") in a page or segment descriptor which is used to indicate whether or not the data for the page or segment is actually in physical RAM ("local memory that occupies a portion of an address space of the processor"). See page 433, lines 3-7. When pages or segments are loaded into memory, the page/segment is transferred to a selected location in physical memory (page 433, lines 32-35) from disk and the present bit is set (page 433, line 36) ("transferring a block of data values from a second memory to selectable segments of the local memory" and "responsive to the transferring of a data value to one of the plurality of segments in the local memory, setting the indicator bit associated with the segment in the local memory to a valid state"). Goodman teaches a process where if a CPU that is about to execute an instruction requiring a page of memory ("operating the processor to access a selected segment in the local memory within the address space"), and the present bit is not set ("responsive to the state of the indicator bit...not in its valid state"), then the data is copied from disk to the physical RAM. See page 434, lines 1-6. Goodman also teaches a direct memory access controller chip associated with a CPU that is used to speed the transfer of information to and from hard disk drives ("...using a direct memory access controller in the digital system" and "operating the direct memory access controller to transfer a data value to the selected segment in the local-memory").—See-page-1-19, lines 17-20.

## Allowable Subject Matter

- 8. Claims 3-6, 11, and 14-20 are allowed.
- 9. Claims 7-10 are allowable over the prior art of record, but are objected to as set forth above.

#### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kish et al. (4,868,738) teaches loading page using DMA on a page fault.

Schimmel (6,496,909) teaches generating a page fault when a valid bit associated with a physical page frame is not valid.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS-from the date of this final action.

12. Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks Washington, D.C. 20231

All "OFFICIAL" patent application related correspondence transmitted by FAX must be directed to the central FAX number at (703) 872-9306:

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"INFORMAL" or "DRAFT" FAX communications may be sent to the Examiner at (703) 746-5693, only after approval by the Examiner.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Fourth Floor (receptionist).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reginald G. Bragdon whose telephone number is (703) 305-3823 (after October 14, 2004, the telephone number will be 571-272-4204). The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and every other Friday from 7:00 AM to 3:30 PM.

The examiner's supervisor, Mano Padmanabhan, can be reached at (703) 306-2903 (after October 14, 2004, the telephone number will be 571-272-4210).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

RGB October 5, 2004 Reginald G. Bragdon
Primary Patent Examiner
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